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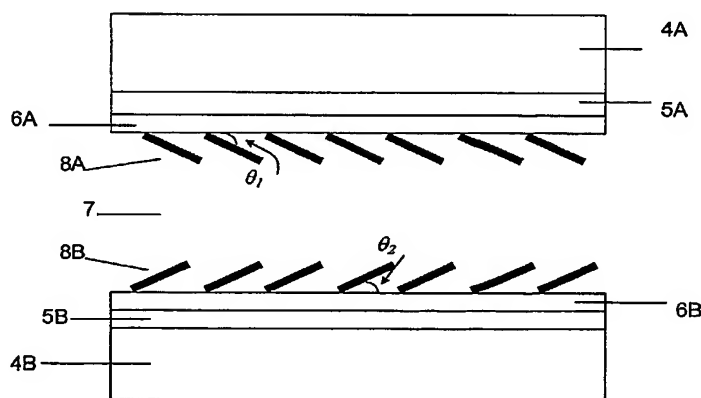
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(54) Title: BISTABLE LIQUID CRYSTAL DEVICE



(57) Abstract: This invention provides a bistable liquid crystal device. The bistable liquid crystal device includes a first substrate having thereon a first conductive layer and a first alignment layer; a second substrate having thereon a second conductive layer and a second alignment layer; and a liquid crystal layer sandwiched between the first and second alignment layers. The first alignment layer induces a first pretilt angle θ_1 in the range of 20° - 65° between the liquid crystal layer in contact with the first alignment layer. The second alignment layer induces a second pretilt angle θ_2 in the range of 20° - 65° between the liquid crystal layer in contact with the second alignment layer. The liquid crystal layer is capable of maintaining a stable bend state or a stable splay state at zero bias voltage and is switchable between the stable bend state and the stable splay state when a switching energy is applied in operation to the liquid crystal layer.



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